



THE ROCKEFELLER UNIVERSITY

1230 YORK AVENUE

NEW YORK, NY 10021

June 12, 1990

JOSHUA LEDERBERG

~~XXXXXXXXXX~~
University Professor

Professor Anne McClaren
Medical Research Council
Mammalian Development Unit
4 Stevenson Way
London NW1 2HE
United Kingdom

Dear Anne:

For my next incarnation, I am planning to make some study of the possible interaction of transcriptional activation of genes and their vulnerability to mutagenesis. My material will be E. coli: and it is not apparent at first order whether this can have any applicability to metazoa. Of course the ancient issue of the separation of the germ cells comes up at once.

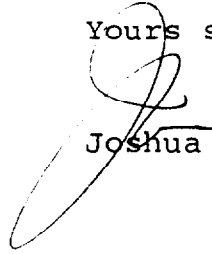
I enjoyed your account of the situation in your Silliman Lecture and I am writing to see if you can bring me up-to-date since that was written, particularly about the latest stage in embryogenesis where there can be said to be any traffic between the germ lines and cells destined for a somatic fate. I have to raise the question how sharp the evidence is that there is any termination to the boundary: I imagine there are experiments with chimeras that could shed some light to it.

This relates to my own research project, in so far as one might be looking to see which genes are differentially transcribed in the germ line, and whether any germ line ancestors might traverse epigenetic or environmental influences that could lead to selective transcription (and by my hypothesis selective mutability). For that very reason it might be quite dangerous for potential germ cells to do that and so that may well have been strongly selected against -- but how stringently?

I am reading Leo Buss' book "Evolution of Individuality" right now.

In any event, I would enjoy hearing from you and with whatever enlightenment you can offer.

Yours sincerely,


Joshua Lederberg